

Section 93 Liquid Asphalts

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4-9301 General

Liquid asphalt is used for penetration treatment and prime coat, both of which are covered in Section 608.3, “Asphalt Surface Treatments,” of the *Highway Design Manual*. Liquid asphalts are also used in the manufacture of asphalt concrete “cold mix” used in highway maintenance for temporary repairs.

In addition to the specifications for liquid asphalts in Section 93, “Liquid Asphalts,” of the *Standard Specifications*, refer to the requirements for liquid asphalts in other sections of the *Standard Specifications* covering work in which liquid asphalts are used.

4-9301 General

4-9302 Before Work Begins

Before work begins, take the following steps:

- Verify the receipt and proper distribution of Form CEM-3101, “Notice of Materials to Be Used,” which covers liquid asphalt.
- Examine the distributor truck to ensure it meets the specified requirements.
- When required, ensure the contractor properly equips delivery trucks, storage tanks, and spreading equipment with the specified devices for measuring the volume of liquid asphalt.

4-9302 Before Work Begins

4-9303 During the Course of Work

During the work, take the following steps:

- If liquid asphalt is used before sampling and testing, obtain a Certificate of Compliance containing the specified information.
- Check the temperature of the liquid asphalt to ensure it is within the specified range when applied.
- Before applying liquid asphalt, ensure the surface to be treated is clean and dry.
- Ensure that liquid asphalt is not sprayed outside designated areas and that bituminous material does not drip from distribution equipment.
- Check the application rate of liquid asphalt to ensure the designated rate. After the first few hundred meters of application, check the initial spread rate. The frequency for checking the spread rate will depend on the accuracy and consistency of the first few checks. Record the spot-check results and the overall daily spread rate in the daily report.

4-9303 During the Course of Work

- Sample liquid asphalt in accordance with the table in Section 6-1, “Sample Types and Frequencies,” of the *Construction Manual* (manual) and with the manual’s instructions in Section 6-202E, “Materials Accepted on the Basis of a Certificate of Compliance.”

4-9304 Measurement and Payment

Section 93, “Liquid Asphalts,” of the *Standard Specifications*, does not contain provisions for payment. Payment clauses for liquid asphalts are in the various sections covering work in which liquid asphalts are used.

It is a good practice, before the asphalt is discharged, to measure the volume in the distributor truck and to make this volumetric measurement again whenever a partial load leaves the work. These actions result in a good check against scale weights, and the second measurement may be used if the contractor fails to submit a weight ticket for the unused asphalt.

When making volumetric measurements, measure the temperature and apply the proper factors for converting volume to mass.